

Data Loss Prevention(DLP)

SafePC Enterprise v 7.0

Build a Safer World, Protect What Matters.

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SafePC Enterprise (DLP)

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- V . Certification

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DLP(Data Loss Prevention)

DLP stands for Data Loss Prevention, which means data loss protection.

It protects your organization's internal data from being compromised by blocking the pathways through which it can leak from your PC to the outside.

It provides policies to detect sensitive information (personal information) on PCs and control the devices, networks, and prints.



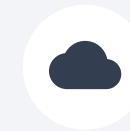
Protecting enterprise data

Enhance data security by detecting and blocking the leakage of confidential or private information within your business or organization to the outside.



Compliance with laws and regulations

By adopting a DLP, you can comply with various IT compliance such as the Information and Communications Network Act and the Personal Information Protection Act.



Rapid response

It provides a variety of audit logs and monitoring to help you quickly detect and respond to data breaches.



Supported OS

- Server : Redhat 8 / Maria DB 10
- PC Agent : Windows 10, 11



Centralized management

- Administrators can create and enforce policies, view audit logs, and monitor using the web console

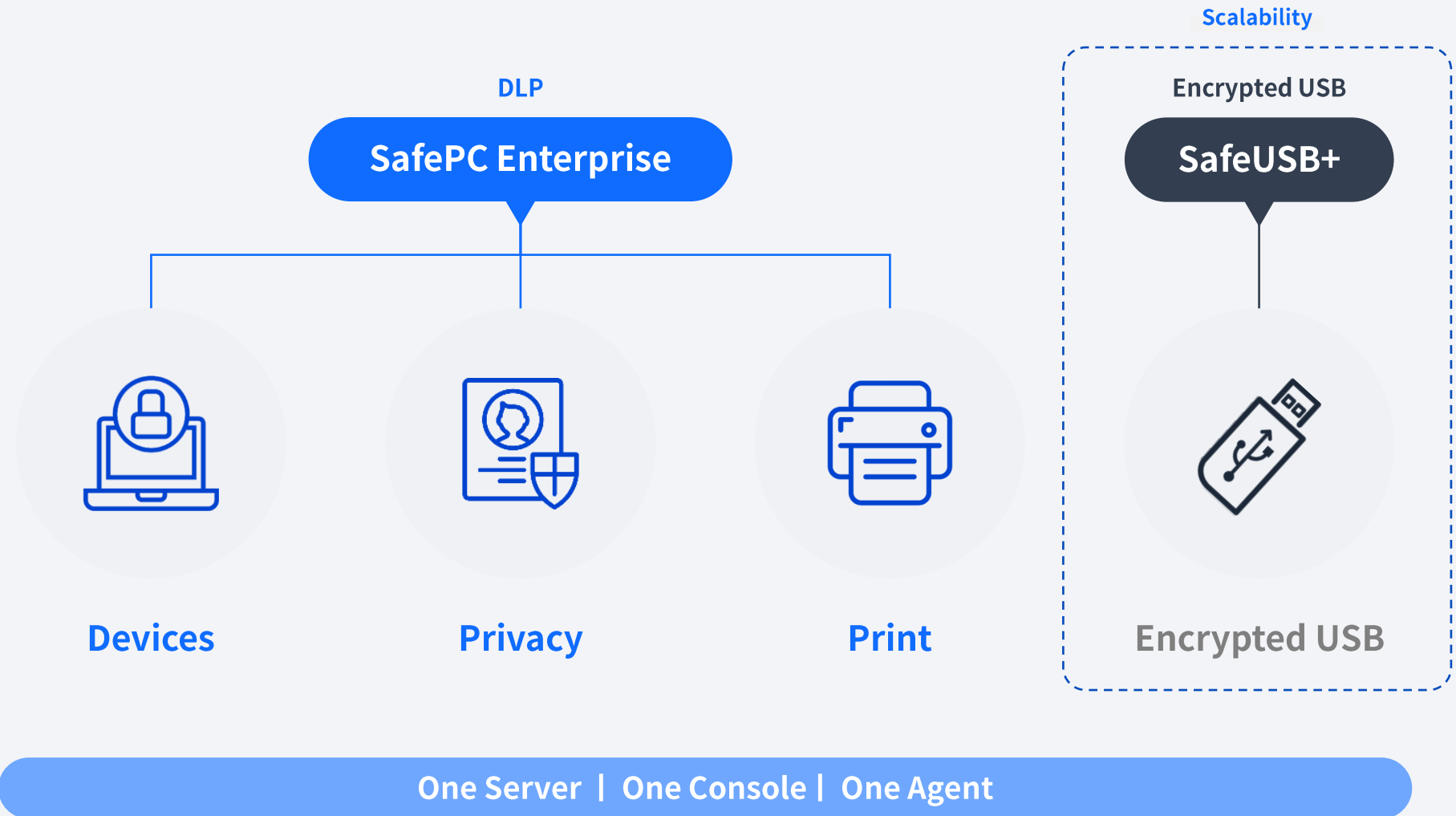


HR DB Integration

- Establish company, department, and individual user policies after linking department and user information for flexible operation

II . DLP Configurations

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SafePC Enterprise V7.0

DLP(Data Loss Prevention)

DLP stands for Data Loss Prevention, which means data loss prevention.

It detects sensitive information (personal information) within a PC and controls it from leaking to the outside through devices, networks, prints.

SafePC Enterprise is Endpoint DLP, where controls are performed by PC Agent.



Device

- Device controls
(auxiliary storage and data transfer devices)
- Online controls
(website access blocking, firewalls, etc.)
- Program execution control
- Control of other PC settings



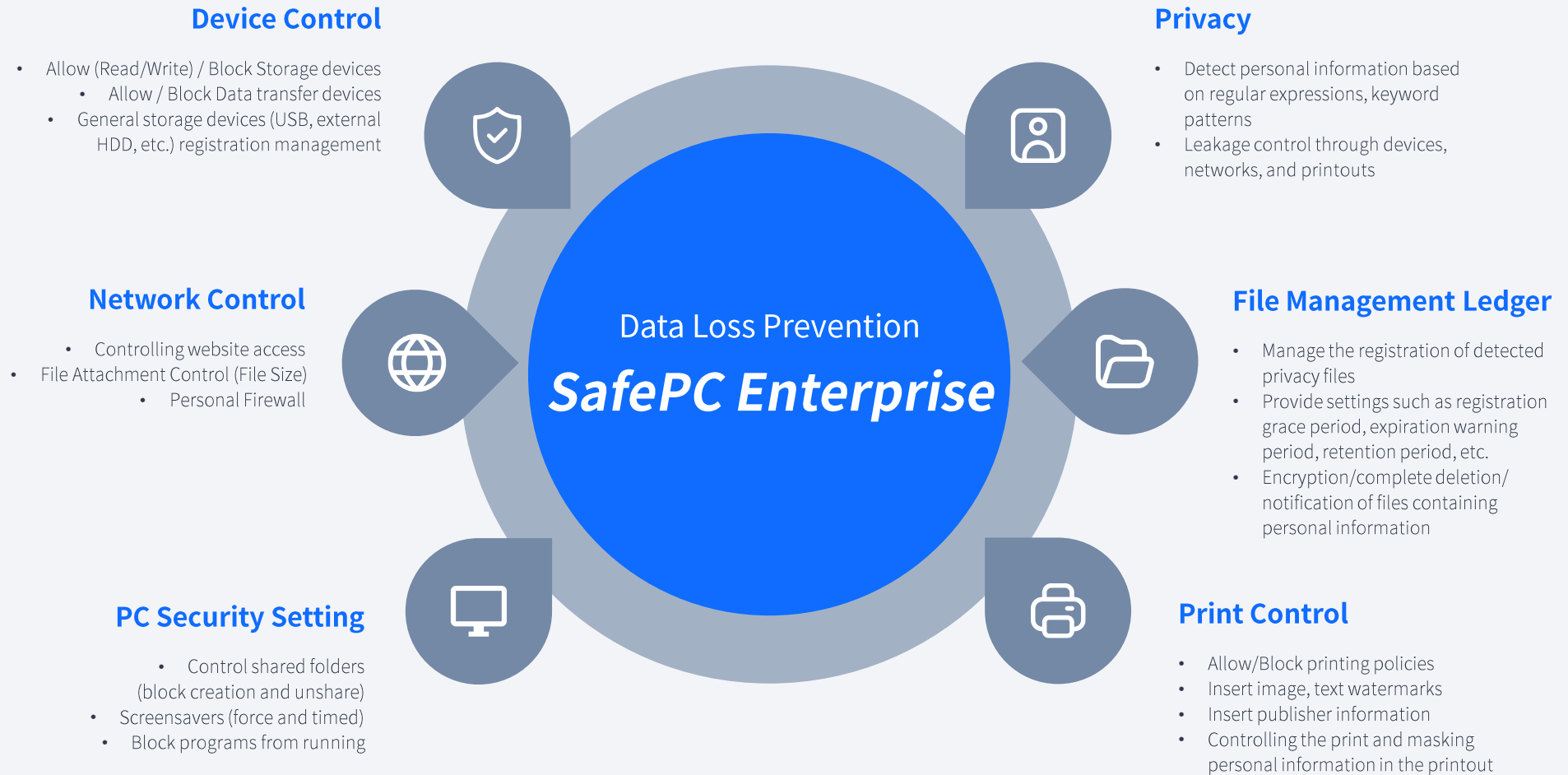
Privacy

- Scan (index) all documents on PCs to identify whether they contain privacy based on patterns
- Block leakage when privacy is included(Storage, online, printout, shared folders, etc.)
- Manage personal information using the File Management Ledger



Print

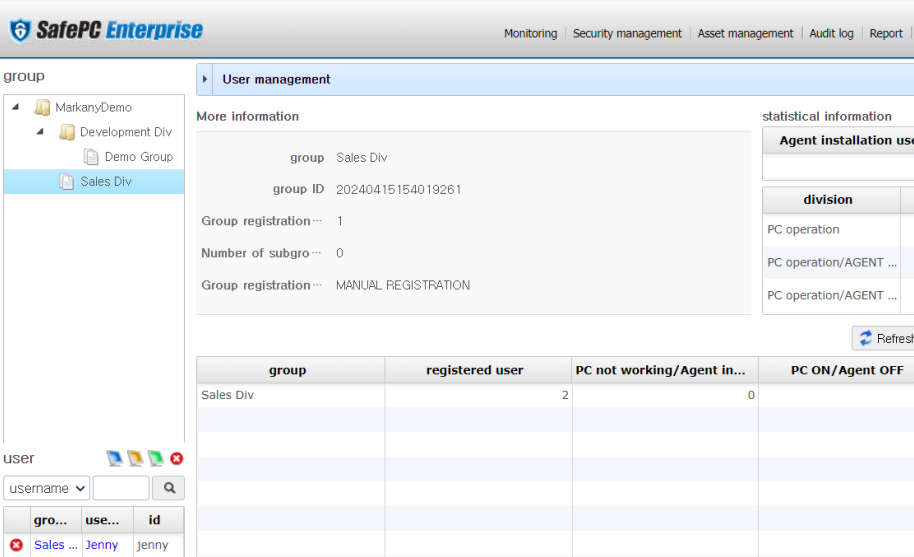
- Printing Allow/Block policies
- Insert image, text watermarks
- Insert publisher information
- Controlling the print and masking personal information in the printout



III. Main Features – User Authentication



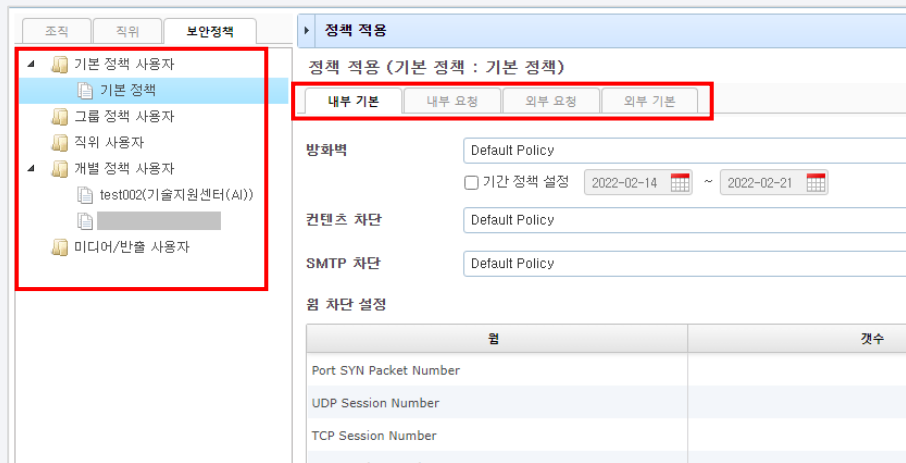
[Log in to the Agent]



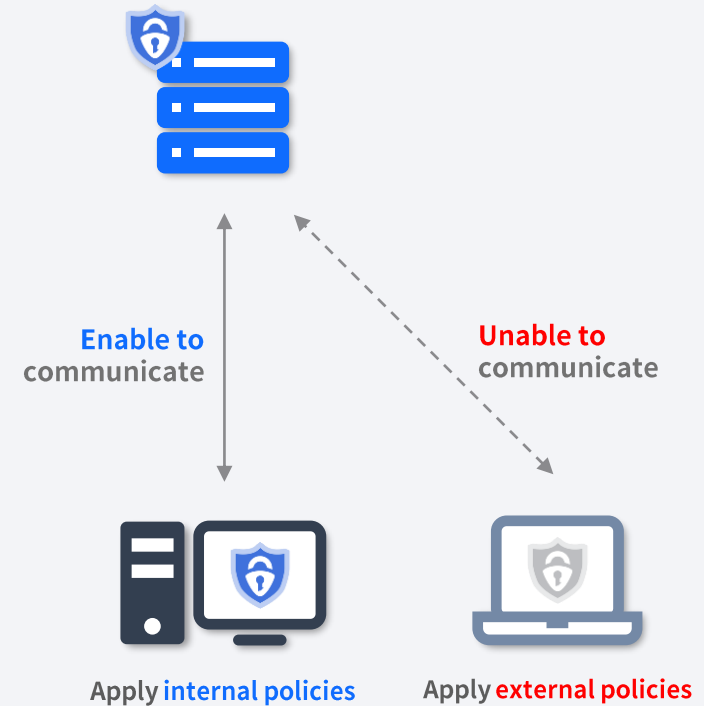
[User management]

- Link and manage department and user information
- After installation, users are authenticated with an ID/authentication code, and enter a password based on password generation rules
- On subsequent boots, enter the password of the authenticated account to log in

III. Main Features – Centralized policy management



[Apply policies]

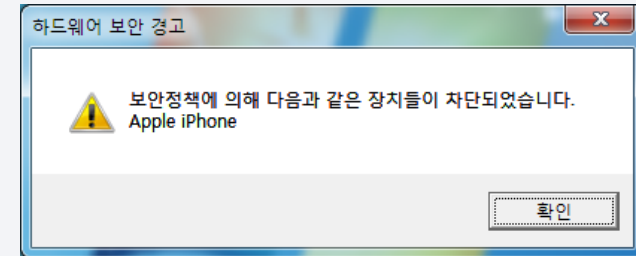


- Internal/external policies can be applied (internal/external with/without server communication, respectively)
- Priority of policies is applied in the order of Media/Export > Individual > Position > Group > Default (All)
- Policies approved using the approval process are applied as policies on the Request tab

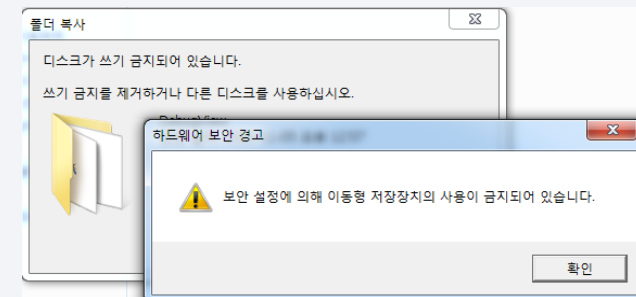
III. Main Features – Device Control

Media name	current permissions	Apply for permission
Floppy disk	Write block / Block reading	☐ Allow writing / ☐ Allow reading
CD/DVD	Write block / Block reading	☐ Allow writing / ☐ Allow reading
PDA	Write block	☐ Allow writing
Infrared port	Write block	☐ Allow writing
Serial port	Write block	☐ Allow writing
Storage device	Write block / Block reading	☐ Allow writing / ☐ Allow reading
Parallel port	Write block	☐ Allow writing
Wireless LAN	Write block	☐ Allow writing
Bluetooth	Write block	☐ Allow writing
HSDPA	Write block	☐ Allow writing
WIBRO	Write block	☐ Allow writing
Smart phone	Write block / Block reading	☐ Allow writing / ☐ Allow reading
Tethering	Write block	☐ Allow writing
Modem	Write block	☐ Allow writing
Data cable	Write block	☐ Allow writing

[Device Control Policies]



[Smartphone Block Message]



[USB Block Message]

- Control and log the Read/Write of secondary memory media (floppy, CD/DVD, USB, external hard drive, smartphone MTP/PTP communication, etc.)
- Control the Allow/Block of wireless networks (Wi-Fi, Bluetooth, Wibro, tethering, etc.)
- Allow access only to wireless APs specified by the administrator (registered SSID control)
- If the 'Portable Storage Device' policy is blocked, general storage devices(USB, external HDD, etc.) can be registered and used as an exception.

III. Main Features – Network Control

The main interface shows the '정책 설정' (Policy Settings) section with a sidebar for '네트워크 제어' (Network Control) containing '방화벽' (Firewall), '웹차단' (Web Blocking), '콘텐츠업로드 차단' (Content Upload Blocking), '원 차단' (Source Blocking), and '네트워크 로그' (Network Log). The main area has tabs for '방화벽' (Firewall), '콘텐츠 차단' (Content Blocking), and '원 차단 설정' (Source Blocking Settings). The '네트워크 로그 설정' (Network Log Settings) section shows a table of logs.

원	갯수
Port SYN Packet Number	0
UDP Session Number	0
TCP Session Number	0

The '네트워크 로그 설정' (Network Log Settings) section shows a table of logs:

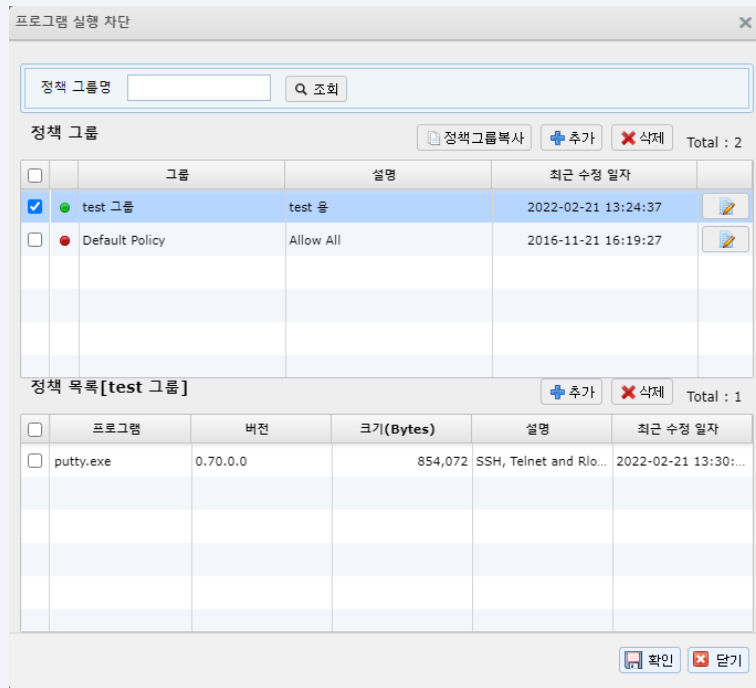
네트워크 로그	남김유무
HTTP 사용로그	남김
SMTP 사용로그	남김
FTP 사용로그	남김

Three detailed policy configuration windows are shown below:

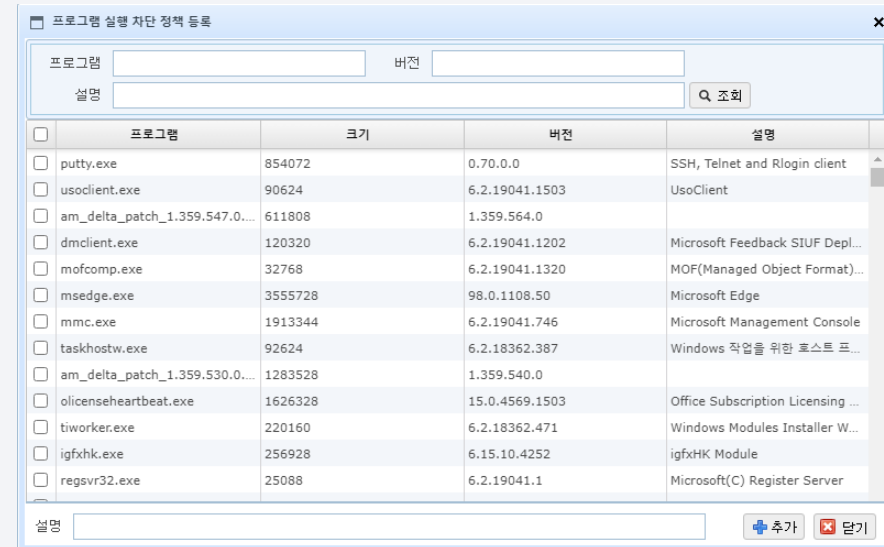
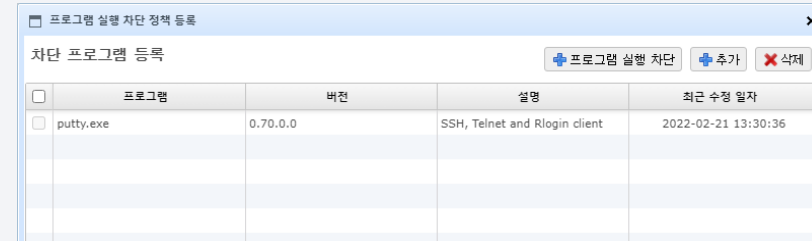
- [URL Block Policies]**: Shows a table with columns for '정책 그룹' (Policy Group), '대상' (Target), '조건' (Condition), and '설정' (Setting). It lists 'test 그룹' and 'Default Policy'.
- [Firewall Policies]**: Shows a table with columns for '정책 그룹' (Policy Group), '대상' (Target), '조건' (Condition), and '설정' (Setting). It lists 'test 그룹' and 'Default Policy'.
- [Content Upload Block Policies]**: Shows a table with columns for '정책 그룹' (Policy Group), '대상' (Target), '조건' (Condition), and '설정' (Setting). It lists 'test 그룹' and 'Default Policy'.

- Block access to web pages (blacklisting, whitelisting)
- Personal firewall (control by port, protocol, IP)
- Block attachment uploads such as webmail (control by specifying the size of attachments)
- Single network card setting (select the network card to be used by the user when applied)

III. Main Features – PC Security Settings(1/2)



[Program Execution Prevention Policies]



- Registering programs to prevent them from running
- Hash of the file is registered, so it can be blocked even if the file name is changed
- Provide the feature to register programs on the Agent PC (collect asset status on the PC)
- Even if the program on the program execution blocking registration list is not installed, it can be loaded after installing the program to be blocked on the console-connected PC.

III. Main Features – PC Security Settings(2/2)

공유폴더 방지

☒ 사용 ☐ 사용 안함

무조건 차단
무조건 차단
패스워드 설정시 허용

[Shared Folders Policies]

공유폴더 통제

그룹 IP 주소 아이디 초기화
사용자명 공유이름 공유 경로 조회

공유 폴더 목록 공유해제 Excel Total : 3

☐	IP	MAC	아이디	그룹	사용자명	공유이름	공유 경로
☐	192.168.159.128	00:0C:29:41:F0:A3	test100	컨설팅	test100	공유폴더1	C:/공유폴더1
☐	192.168.159.128	00:0C:29:41:F0:A3	test100	컨설팅	test100	공유폴더2	C:/공유폴더2
☐	192.168.159.128	00:0C:29:41:F0:A3	test100	컨설팅	test100	공유폴더3	C:/공유폴더3

[Shared Folders Status]

정책 목록[기본정책]

세부 항목

IP 변경 차단 ☐ 사용 ☐ 미사용

Proxy설정 차단 ☐ 사용 ☐ 미사용

화면 보호기 설정 대기 시간 * 초

화면 보호기 설정 암호 적용 ☐

제어판 전체 차단 ☐

[Other PC security Policies]

- View shared folders set up on Agent PCs and prevent them from being turned off or created
- Set Windows password complexity and prompt users to set a password if one is not set
- Force a screensaver and pop up a password prompt when the screensaver is turned off

III. Main Features – Process of Privacy Policy



Regular expression patterns

Patterns

Provide check expressions to search for strings with specific rules (13 default regular expressions are provided, such as social security numbers, passport numbers, etc.)

Leakage Control Policies

Ratings

Set policies to control the leakage of detected personal information files via portable storage devices, networks (such as mail), printouts, etc.

Keyword patterns

Patterns

Allows administrators to add the ability to search for specific text within a document in addition to regular expression patterns (private, secret, confidential, etc.)

Optional Policies

Apply policies

Set up leak control policies for undetectable files, file register policies, how often to receive logs and policies, etc.

III. Main Features – Privacy detection status

You need to delete or register a file that is not registered.

849 results (849 unregistered, 0 pending, 0 registered, 0 error detection pending, 0 error detection) [Details](#)

Reg/Ext request Error detection request Wiping Status renew Total Search Unregistered 100

☐	Registatio...	File path	File name	Numb...	Pattern	Retention period	Detection t...	Last change	File status
☐	Unregistered	C:\DATA\08...	08.IPADD...	15	IP Address	Register within 3 days	2024-06-20...	2012-02-06	Plain file
☐	Unregistered	C:\DATA\08...	09.IPADD...	15	IP Address	Register within 3 days	2024-06-20...	2012-02-06	Plain file
☐	Unregistered	C:\DATA\08...	10.IPADD...	15	IP Address	Register within 3 days	2024-06-20...	2012-02-06	Plain file
☐	Unregistered	C:\DATA\08...	11.IPADD...	15	IP Address	Register within 3 days	2024-06-20...	2012-02-06	Plain file
☐	Unregistered	C:\DATA\08...	12.IPADD...	15	IP Address	Register within 3 days	2024-06-20...	2012-02-06	Plain file
☐	Unregistered	C:\DATA\08...	13.IPADD...	15	IP Address	Register within 3 days	2024-06-20...	2012-02-06	Plain file
☐	Unregistered	C:\DATA\08...	14.IPADD...	15	IP Address	Register within 3 days	2024-06-20...	2020-07-26	Plain file
☐	Unregistered	C:\DATA\08...	15.IPADD...	15	IP Address	Register within 3 days	2024-06-20...	2012-02-06	Plain file
☐	Unregistered	C:\DATA\08...	16.IPADD...	15	IP Address	Register within 3 days	2024-06-20...	2012-02-06	Plain file
☐	Unregistered	C:\DATA\08...	17.IPADD...	15	IP Address	Register within 3 days	2024-06-20...	2012-02-06	Plain file
☐	Unregistered	C:\DATA\08...	18.IPADD...	15	IP Address	Register within 3 days	2024-06-20...	2012-02-06	Plain file
☐	Unregistered	C:\DATA\08...	19.IPADD...	15	IP Address	Register within 3 days	2024-06-20...	2012-02-06	Plain file
☐	Unregistered	C:\DATA\08...	20.IPADD...	15	IP Address	Register within 3 days	2024-06-20...	2012-02-06	Plain file
☐	Unregistered	C:\DATA\08...	21.IPADD...	15	IP Address	Register within 3 days	2024-06-20...	2012-02-06	Plain file
☐	Unregistered	C:\DATA\08...	22.IPADD...	15	IP Address	Register within 3 days	2024-06-20...	2012-02-06	Plain file
☐	Unregistered	C:\DATA\08...	23.IPADD...	15	IP Address	Register within 3 days	2024-06-20...	2012-02-06	Plain file

<< < 1 2 3 4 5 > >>

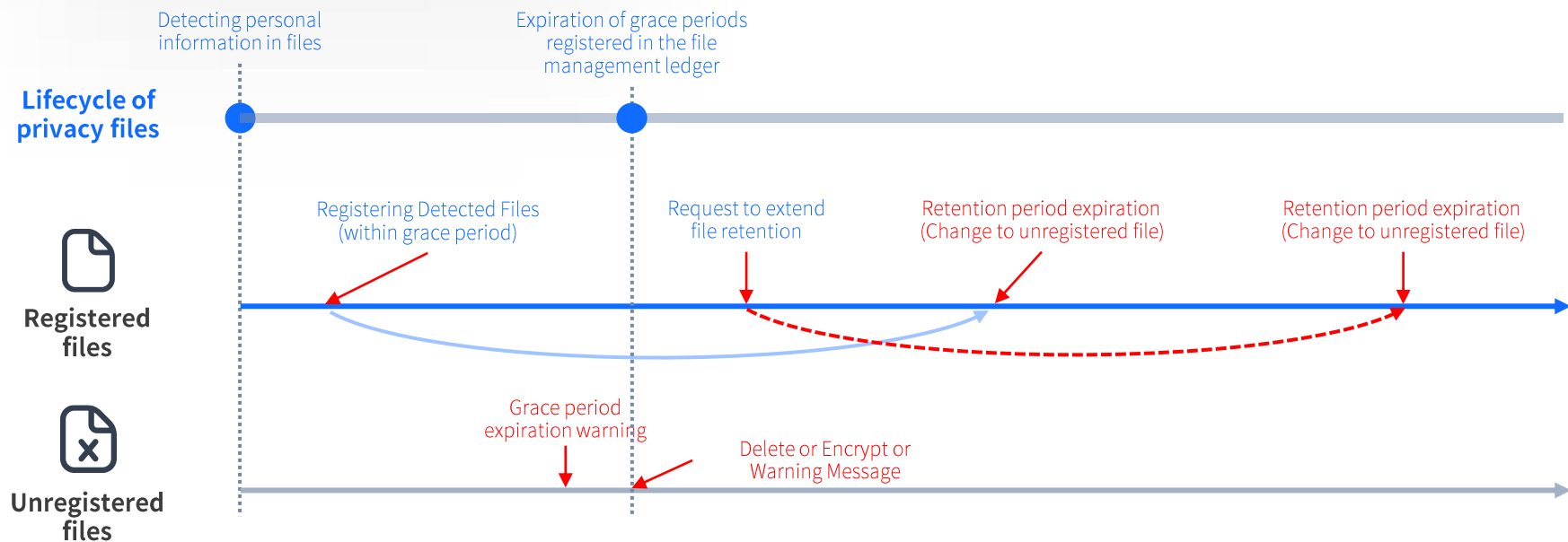
[Privacy Detection Result (User)]

- Users can view the results of privacy (important information) detection according to the policy through the tray menu (double-click to view detailed status)
- The detected file is available after registration, and when the usage period expires, it is used after applying for an extension (File Management Ledger)
- Administrators can view the detection history of each user in the web console.

III. Main Features – File Management Ledger

- Operation of the File Management Ledger in accordance with the Personal Information Protection Act “Article 32 Registration and Disclosure of Personal Information Files”, the Enforcement Rules “Article 3 Form of Books and Documents Related to Personal Information Protection Business”, and the Electronic Financial Supervision Regulations “Article 13 Computerized Data Protection Measures”.
- The File Management Ledger is a method of registering and managing privacy files held by users. It provides safe management of personal information files by explaining the purpose and laws for retaining such files and deleting them completely when the retention period has expired.

Lifecycle of the File Management Ledger



III. Main Features – Control of Privacy Leaks

Add rating

* Grade name

explanation

Notification Common Standard

* group threshold

☐ Whether to send mail

* user threshold

☐ Whether to send mail

media control

Media name	write control	WriteLogging
Floppy disk	block	use
Mobile storage device	block	use
Print	block	
Shared folder	block	use
Network	block	use

Warning text output

Not in use

save

delete

close

SafePC Request Permission

Media Blocked Message

정책에 의해서 차단된 파일 목록입니다.

List Reset

파일명	등급명	타입	메시지
개인정보 테스트-01.txt	차단	USB	차단
개인정보 테스트-02.txt	차단	USB	차단
개인정보 테스트-03.txt	차단	USB	차단
개인정보 테스트-04.txt	차단	USB	차단
개인정보 테스트-05.txt	차단	USB	차단
개인정보 테스트-06.txt	차단	USB	차단
개인정보 테스트-07.txt	차단	USB	차단
개인정보 테스트-08.txt	차단	USB	차단
개인정보 테스트-09.txt	차단	USB	차단
개인정보 테스트-10.txt	차단	USB	차단

[Privacy Block pop-up]

- Controls leakage of detected personal information files to storage devices / prints / shared folders / networks (Features of Allows/Blocks, Write logging, and Save original text)
- In case of network, only analyzed protocols are supported
 - Website: Naver, Daum, Nate, DreamWiz, Clairvoyant, Korea.com, Google, JoinsMSN, Facebook, Whatsapp, Twitter
 - Messenger: (File attachment control) Nate-on, MSN, YAHOO, Mitsuri, Taki, POP Messenger / (Drag&Drop control) Line, Skype, KakaoTalk, FreeBond
 - Others: Outlook, SMTP (25port)

III. Main Features – Print Control

Registering a print usage control group

Policy group name*

explanation

Policy settings

- watermark: not used [setting] [delete]
- Mark recognition: not used [setting] [delete]
- Barcode/Overlay: not used [setting] [delete]
- etc: not used [setting] [delete]

[save] [close]

[Print control Policies]



원티마크

표시마크

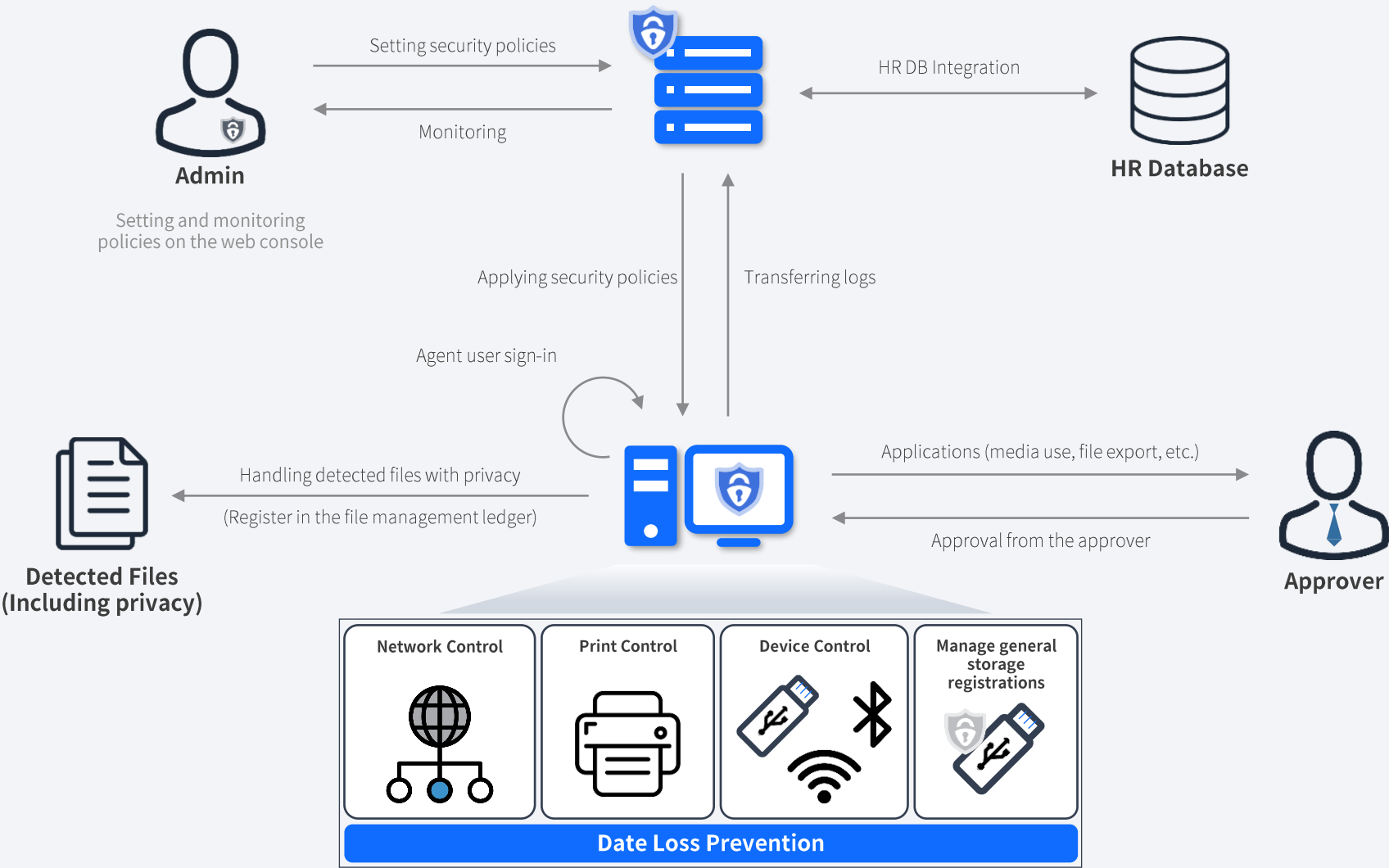
바코드/오버레이

기타



- Block/Allow Policies of Printing
- Provide image/text watermark when allowing print (adjustable position)
- Print out printer information (username, ID, department, IP, print time, etc.)
- Save printing logs and copies

III. Main Features – Operation Process



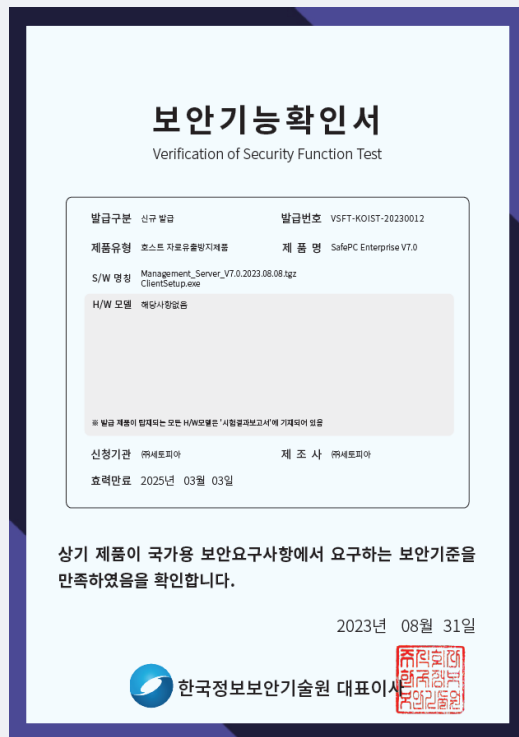
III. Main Features – Approval Process

Category	Approval Process	내용
Common	Apply for user registration	- If you want to enroll additional users beyond the associated user, you can apply for them from the Application - Administrators can also add them from the console
	Apply to use Device	- Request an Exception to Device Control policies - Select internal/external, duration, device, and more to request an exception.
	Apply to register General Storage Device	- Allow registered general storage device even if device control policy is “Block” - Plug-in the device and extract the serial number to register it with the server - Exception is available only when the registered device is in internal state (can communicate with the server)
	Apply to accept Bad USB	- BadUSB: Manipulates the firmware of a regular USB to recognize it as a keyboard or mouse and execute malicious code (exploits the fact that the human interface is excepted in DLP systems) - Block all unregistered devices, including keyboards and mouse (whitelisting method)
DLP	File Export Request (General/Large size)	- File-by-file request for exceptions with blocking policy applied - To apply for exporting, users upload files and specifies file PW (download encrypted ZIP file after approval)
	Apply for registration in the File Management Ledger	- If you need to use the detected personal information file, register in the ledger to use it according to the privacy policy - Enter the purpose and period of retention, get authorization from the approver, and use it for that period of time - If you need to extend the period of use, apply for an extension and use it
	Request false positive/false negative files	- Files detected by the Privacy Policy, but may be false positives or false negatives - Users can apply for an exception to the Privacy Policy if they believe a file is a false positive or false negative - Even if the file is registered as a false positive, if the file is modified and saved, it will be treated as a personal information file again
	Request to print official documents	- The printout is watermarked by the printing security policy - If you need it with watermark removed, apply for the exception
	Request a printout	- Request to print if it is blocked by privacy policy - Upload the file you want to print and apply for printing, and select whether to exclude masking.

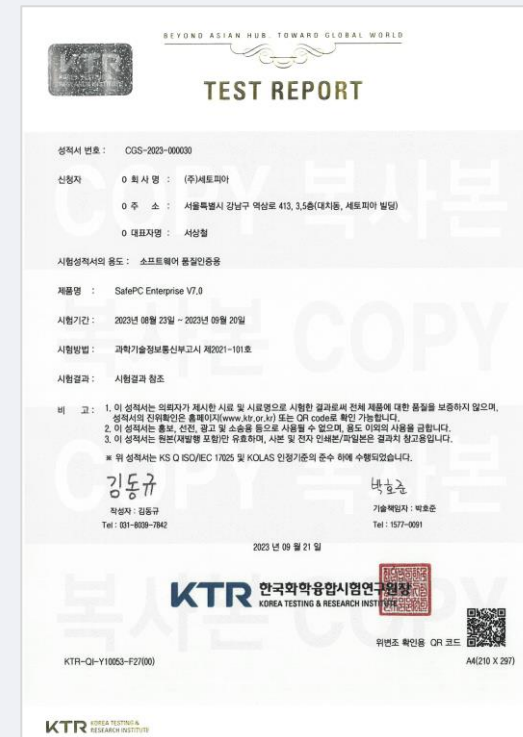
SafePC Enterprise V7.0 has acquired 'Verification of Security Function Test' and 'GS Certification', and is on the Digital mall of the Public Procurement Service

SafePC Enterprise V7.0

- Verification of Security Function Test
: August, 2023



- GS Certification : September, 2023



SAFE PC ENTERPRISE

THANK YOU

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